

**EMPLOYEE BENEFIT PLANS**  
**EXPLANATION NO. 5C**  
**COVERAGE AND NONDISCRIMINATION REQUIREMENTS: GENERAL TESTS AND**  
**AVERAGE BENEFIT TEST**

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This explanation is an appendix to Form 5627, Worksheet Number 5, and Form 9638, Worksheet Number 5A. It is to be used to identify major problems relating to the requirement under section 401(a)(4) of the Code that a plan be nondiscriminatory in the amount of contributions or benefits where the plan sponsor has requested a determination that the plan meets this requirement by satisfying a general test. It is also to be used to identify major problems relating to the minimum coverage requirements of section 410(b) of the Code where the plan sponsor has requested a determination that the plan meets the requirements by satisfying the average benefit test.

References at the end of each paragraph in the explanation are to the Internal Revenue Code and the Income Tax Regulations unless otherwise noted.

The technical principles in this publication may be changed by future regulations or guidelines.

## APPENDIX

This appendix to Worksheet Numbers 5 and 5A relates to the general tests for nondiscrimination in the amount of contributions or benefits under a plan and the average benefit test. Part 1 deals with the requirements of the general tests under the section 401(a)(4) regulations. Part II deals with the average benefit test under the section 410(b) regulations.

If the employer has requested a determination that the plan satisfies a general test or the average benefit test, the specialist should use this appendix as a tool to assist in the review of the employer's demonstration. Part 1 of this appendix should also be used to assist in reviewing a demonstration that a defined benefit plan satisfies the alternative safe harbor for flat benefit plans. (See line X.c. of Worksheet 5A.)

The instructions for Schedule Q (Form 5300) contain guidelines that employers are urged to follow in preparing demonstrations relating to the general tests and the average benefit test. Because there may be situations in which an employer can adequately demonstrate that a general test or the average benefit test has been satisfied without addressing each of the elements described in the guidelines, employers are not required to address those elements of the guidelines they consider unnecessary to a particular demonstration. They are asked to briefly explain why omitted elements of the guidelines are not addressed.

Employers are also asked to indicate in their demonstrations where the elements in the guidelines in the instructions for Schedule Q are addressed. Therefore, the explanations of the general tests and the average benefit test in this appendix are also keyed to those guidelines.

The guidelines include those elements that ordinarily must, at a minimum, be considered in making a determination that a plan satisfies a general test or the average benefit test. These elements relate to specific aspects or requirements of the general tests and the average benefit test. Specialists should review the employer's demonstration to ensure not only that the plan has been shown to pass the relevant test but also that the manner in which the employer has tested its plan, as disclosed in its demonstration, conforms to the requirements of the regulations. Specialists may request additional information or demonstrations (including information pertaining to any of the elements described in the guidelines) if it is determined that such additional information or demonstrations are needed to make a correct determination.

Employers are encouraged to include with their demonstrations examples that clarify the analysis of a general test or the average benefit test in a particular plan with respect to representative sample employees. Such examples could show the actual calculation of particular employees' normal and most valuable accrual rates, for example. The method of these calculations should also be reviewed for conformity with the regulations.

Employers are responsible for the accuracy of factual representations and conclusions contained in their applications. However, the specialist should ensure that any representations or statements in the demonstration regarding specific plan provisions are accurate. For example, if the employer indicates that for general testing purposes average annual compensation uses the plan's definition of compensation and that a demonstration is not needed to show that the definition is nondiscriminatory, the specialist should ensure that the plan's definition satisfies section 1.414(s)-1(c)(2) or section 1.414(s)-1(c)(3) of the regulations.

The extent of the employer's demonstration will determine the extent of reliance provided by a favorable determination letter. It is likely, therefore, that many employers will go beyond the elements in the guidelines in the Schedule Q instructions in preparing their demonstrations. The specialist will need to consider all aspects of the employer's demonstration, not merely those addressed in the guidelines or this explanation. Because of the potential complexity of the application of the general test and average benefit test rules in particular situations, specialists are cautioned to use this appendix in their review of a demonstration primarily as a guide to the regulations rather than as a primary source. The specialist should refer to the actual regulations when reviewing demonstrations of the general tests or the average benefit test.

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## **Part 1 - General Test Demonstrations**

### **Introduction**

A plan will satisfy the requirement that it be nondiscriminatory in amount if either the contributions or the benefits provided under the plan are nondiscriminatory in amount. It is not necessary for both the contributions and benefits provided under the plan to be nondiscriminatory in amount.

In applying this requirement employee-provided contributions and benefits are tested separately from employer-provided contributions and benefits. The rules for determining the employer-provided benefit under a contributory defined benefit plan and for determining whether the employee-provided benefits in such a plan are nondiscriminatory in amount are described in **q.**, below. Employee contributions that are allocated to a separate account are generally subject to the ACP nondiscrimination test of section 401(m) and are not tested under the rules of section 401(a)(4).

The general tests determine whether a plan satisfies the nondiscrimination in amount requirement by comparing the actual rates of accruals or allocations provided to employees under the plan. Thus, a defined contribution (DC) plan can be shown to be nondiscriminatory in amount on the basis of contributions allocated to employees under the plan, and a defined benefit (DB) plan can be shown to be nondiscriminatory in amount on the basis of the benefits provided under the plan.

Alternatively, because a DC plan can be tested on the basis of benefits and a DB plan can be tested on the basis of contributions, a DC plan can be shown to be nondiscriminatory in amount on the basis of equivalent benefits provided under the plan and a DB plan can be shown to be nondiscriminatory in amount on the basis of equivalent allocations provided under the plan. This is referred to as cross-testing.

The sections of the regulations that correspond to the foregoing tests are as follows:

- 1.401(a)(4)-2(c) - Contributions testing of a DC plan (DC general test)
- 1.401(a)(4)-3(c) - Benefits testing of a DB plan (DB general test)
- 1.401(a)(4)-8(b) - Cross-testing of a DC plan on a benefits basis
- 1.401(a)(4)-8(c) - Cross-testing of a DB plan on a contributions basis

There are special rules to determine whether a permissively aggregated plan that consists of one or more DC plans and one or more DB plans (a DB/DC plan) is nondiscriminatory in amount. These special rules are in section 1.401(a)(4)-9(b)(2) of the regulations. There are also special safe harbor testing rules for cash balance plans (i.e., DB plan that define benefits for each employee by reference to the employee's hypothetical account) that allow these plans to show they are nondiscriminatory in amount on the basis of hypothetical allocations.

When an employer requests a determination that a plan satisfies a general test, the employer is required to submit a demonstration that one of these tests is satisfied. This demonstration should be labeled Demo 6.

The following explanations discuss the requirements of each of these tests. The organization of these explanations follows that of the guidelines provided for general test demonstrations in the instructions for Schedule Q (Form 5300).

#### 1.401(a)(4)-1(b)(2)

##### **I. The explanations in this section generally relate to all general test demonstrations (unless otherwise noted).**

**a.** The basic requirement of the general tests is that each rate group under the plan must satisfy section 410(b). For the DC general test, rate groups are defined on the basis of allocation rates. For the DB general test, rate groups are defined on the basis of normal and most valuable accrual rates.

When a DC plan is cross-tested, rate groups are defined on the basis of equivalent accrual rates and these are then substituted for allocation rates in the DC general test. When a DB plan is cross-tested, rate groups are defined on the basis of

equivalent normal and most valuable allocation rates and these are then substituted for normal and most valuable accrual rates in the DB general test.

A DB/DC plan must satisfy the DB general test, substituting aggregate normal and most valuable allocation or accrual rates for normal and most valuable accrual rates. How allocation and accrual rates are determined is discussed in **d.**, below.

There is one rate group for each highly compensated employee (HCE) in the plan. There are thus as many rate groups as there are HCEs in the plan. For the DC general test, one HCE's rate group consists of that HCE and all other employees in the plan (including both nonhighly compensated employees (NHCEs) and HCEs) who have allocation rates at least equal to that HCE's allocation rate. (In the case of a DC cross-tested plan, equivalent allocation rates are substituted in this formula.)

Similarly, for the DB general test, one HCE's rate group consists of that HCE and all other employees in the plan (including both NHCEs and HCEs) who have both a normal accrual rate at least equal to that HCE's normal accrual rate and a most valuable accrual rate at least equal to that HCE's most valuable accrual rate. (In the case of a DB cross-tested plan, equivalent normal and most valuable allocation rates are substituted in this formula. Likewise, in the case of a DB/DC plan, aggregate normal and most valuable allocation or accrual rates are substituted in this formula.)

Because the separate rate groups for two or more HCEs who have the same normal and most valuable accrual rates (DB general test) or the same allocation rates (DC general test) are identical, these identical separate rate groups in fact form a single rate group for purposes of determining whether the rate group satisfies section 410(b). Grouping of rates, discussed in **f.**, below, also allows the employer to minimize the amount of rate group testing.

A rate group is treated as if it were a separate plan for purposes of determining whether it satisfies section 410(b). (See Part IV of Worksheet 5 or Part V of Worksheet 5A regarding the minimum coverage requirements of section 410(b). In determining the ratio percentage of the rate group, all nonexcludable employees are taken into account, regardless of whether they benefit under the plan. Thus, for example, to determine whether a rate group satisfies the ratio percentage test, divide the percentage of all nonexcludable NHCEs who are in the rate group by the percentage of all nonexcludable HCEs who are in the rate group.

If a rate group does not pass the ratio percentage test, it must satisfy the average benefit test. Special rules apply in making this determination.

First, the rate group will satisfy the nondiscriminatory classification test only if the ratio percentage of the rate group is greater than or equal to the lesser of:

1. the ratio percentage of the plan, or

2. the midpoint between the safe and unsafe harbor percentages applicable to the plan.

Second, the rate group will satisfy the average benefit percentage test if the plan satisfies this test. However, if the plan is using the special collectively bargained plan rule in section 1.410(b)-5(f) of the regulations to satisfy the average benefit percentage test, the rate group must also separately satisfy this special rule.

The employer is asked to identify each rate group (on the basis of accrual or allocation rates, as more fully described in **d.**, below) and to demonstrate how each rate group satisfies section 410(b). The employer is not required to present in its demonstration the actual rates for individual employees. The employer must, however, generally show how the rate groups meet the coverage requirements by providing the percentage of nonexcludable HCEs and NHCEs, respectively, in each rate group. Because employees may be in more than one rate group, it may not be possible to compare the information given with the rate group demonstrations to information given for the plan's coverage as a whole. However, the rate group coverage demonstrations should generally be reviewed as if they were coverage demonstrations for a plan. Note that if the employer is using the QSLOB rules for purposes of coverage and nondiscrimination, the employer's demonstration that the rate group satisfies section 410(b) must include a demonstration that the rate group satisfies the gateway test. Refer to Part II of Worksheet 5 or 5A, lines b. and c., for a further discussion of the application of section 410(b) when the employer is using the QSLOB rules.

1.401(a)(4)-2(c)(1) and (3)

1.401(a)(4)-3(c)(1) and (2)

1.401(a)(4)-8(b)(1)

1.401(a)(4)-8(c)(1)

1.401(a)(4)-9(b)(2)

**b.** As noted above, the employer may test a DC plan for nondiscrimination in amount on the basis of allocation rates or on the basis of equivalent benefits. Likewise, a DB plan may be tested for nondiscrimination in amount on the basis of normal and most valuable accrual rates or on the basis of equivalent normal and most valuable allocation rates. A DB/DC plan must satisfy the DB general test, substituting aggregate normal and most valuable allocation or accrual rates for normal and most valuable accrual rates. The regulations provide a safe harbor testing method for cash balance plans. If the plan is intended to satisfy this safe harbor testing method, the hypothetical allocations under the plan must either satisfy a special design-based safe harbor (see line XI.a.(v) of Worksheet 5A) or a modified general test. This modified general test is the DC general test, but based on the hypothetical allocations under the plan rather than actual allocations. The employer's demonstration must clearly disclose the basis on which the plan is being tested. The actual calculation of rates is discussed in **d. and s.**, below.

1.401(a)(4)-1(b)(2)(ii)  
1.401(a)(4)-1(b)(2)(iii)  
1.401(a)(4)-8(c)(3)(iii)(C)  
1.401(a)(4)-9(b)(2)

**c.** The requirement that a plan be nondiscriminatory in amount is applied on the basis of the plan year and the terms of the plan in effect during that year. The employer must indicate in its demonstration the plan year that is being tested. In performing any of the general tests, the compensation, contributions, and benefit accruals that are used in the test must be determined with respect to the plan year being tested. However, there is an exception to this rule for certain corrective amendments made after the end of the plan year that may be taken into account as if adopted and in effect as of the beginning of the plan year. (See the discussion of corrective amendments in Alert Guidelines #4.)

There is also a special rule that applies solely for purposes of whether the Service will issue a determination letter. This rule provides that, under limited circumstances, the employer may use data in preparing a demonstration that is for a year prior to the plan year that the employer has indicated is the year being tested. If the employer is using a prior year's data, it is required to disclose this in its application. The specialist need not check that all the conditions for using a prior year's data have been met (such as that the data is the most recent available or that there has been no misstatement with respect to the data). However, specialists should note that a prior year's data will not be acceptable unless the data is relevant to the operational effect of the plan provisions under review and coverage testing is based on the same prior year's data. The fact that a favorable determination letter has been issued for a plan on the basis of a prior year's data does not mean that the employer may rely on a prior year's data in testing a plan's operational compliance with the qualification requirements. However, see Rev. Proc. 93-42 regarding data and substantiation requirements relevant to testing operational compliance.

Whatever testing option the employer uses for determining that the minimum coverage requirements are satisfied must also be used for determining that the nondiscrimination requirements are satisfied. See Part IV of Worksheet 5 or Part V of Worksheet 5A.

1.401(a)(4)-1(c)(3) and (4)  
1.401(a)(4)-11(g)  
1.410(b)-8(a)  
Rev. Proc. 93-42

**d.** As noted above, the employer is not required to submit information regarding individuals' allocation or accrual rates. The employer is required to describe, in its demonstration, the method used to determine these rates, including, in the case of a plan tested on a benefits basis, the measurement period and testing service (each

defined below). The employer is also encouraged to submit examples showing the calculation of allocation or accrual rates for representative sample employees.

This section discusses how allocation rates are determined for the DC general test, how normal and most valuable accrual rates are determined for the DB general test, and how aggregate normal and most valuable allocation or accrual rates are determined for DB/DC plans under the test that applies to these plans. The determination of equivalent accrual rates and equivalent normal and most valuable allocation rates for, respectively, DC and DB plans that are cross-tested is discussed in **s.**, below.

Under the DC general test, each employee's allocation rate for a plan year is equal to the employer contributions and forfeitures that are allocated or treated as allocated to the employee's account for the year, expressed as a percentage of the employee's plan year compensation or as a dollar amount. For example, amounts required to be contributed and allocated to an employee's account under a money purchase pension plan for a plan year are taken into account even if the required contribution has not actually been made. Income, expenses, gains, and losses allocated to the account are not taken into account.

Elective contributions under a qualified cash or deferred arrangement are not taken into account. These contributions are subject to the ADP discrimination test of section 401(k). Matching contributions that are subject to the ACP discrimination test of section 401(m) also are not taken into account. Qualified nonelective contributions that are treated as elective or matching contributions are taken into account.

In determining allocation rates, the employer may impute permitted disparity and may also group allocation rates. See **e.** and **f.**, below.

See **i.**, below regarding plan year compensation.

Allocation rates must be determined in a consistent manner for all employees for the plan year.

1.401(a)(4)-1(b)(2)(ii)(B)

1.401(a)(4)-2(c)(2)

1.401(a)(4)-12

Under the DB general test, two rates are required to be calculated: the normal accrual rate and the most valuable accrual rate. These express, for nondiscrimination testing purposes, the rates at which the employee accrues, respectively, the accrued benefit and the most valuable optional form of payment of the accrued benefit for the plan year. The rates are determined as follows:

Normal accrual rate - divide the increase in the accrued benefit (within the meaning of section 411(a)(7)(A)(i)) during the "measurement period" by the employee's "testing service" during the measurement period. (These terms are defined below.)

Most valuable accrual rate - divide the increase in the most valuable optional form of payment of the accrued benefit during the measurement period by the employee's testing service during the measurement period.

In both cases, the rate is expressed either as a dollar amount or as a percentage of the employee's "average annual compensation" (see **i.**, below).

Instead of determining the most valuable accrual rate as described above, the employer may determine an employee's most valuable accrual rate using the "floor on most valuable accrual rate" rule. The employer's demonstration should indicate if this rule is being used. Under this option, the employee's most valuable accrual rate for the plan year is equal to the employee's highest most valuable accrual rate determined for any prior plan year. This option is available only if the employee's normal accrual rate has not changed significantly from the normal accrual rate for the prior year in which the highest most valuable accrual rate was determined and there have been no plan amendments since such prior year that affect the determination of most valuable accrual rate. The employer is not required to demonstrate that the criteria for using this rule are satisfied; if such a demonstration is included with the employer's general test demonstration, however, the specialist should determine that the criteria are met.

For purposes of calculating the normal accrual rate, if the accrued benefit is not expressed as a straight life annuity commencing at the employee's "testing age" (see **j.**, below) it must first be "normalized," or converted to an actuarially equivalent straight life annuity (see **g.**, below).

The most valuable accrual rate reflects the value of all benefits accrued or treated as accrued under section 411(d)(6) that are payable in any form and at any time under the plan. These include early retirement benefits, retirement type subsidies, early retirement window benefits, and qualified social security supplements (QSUPPs). (A QSUPP is a social security supplement that, under the provisions of the plan, will be treated as an early retirement benefit in which the employee vests and that is subject to section 411(d)(6) protection, and that meets certain accrual and other requirements. Refer to section 1.401(a)(4)-12 of the regulations regarding the definition of QSUPP. If the employer's demonstration indicates that a QSUPP has been taken into account in determining the most valuable accrual rate, the specialist should determine that the plan provides a social security supplement that meets the requirements of the regulations.)

Because the qualified joint and survivor annuity (QJSA) must be at least as valuable as any other optional form of benefit commencing at each age, the most valuable optional form of payment of the accrued benefit is determined as follows: calculate the normalized QJSA that is potentially payable in the current or any future

plan year at any age under the plan and select the largest benefit per year of testing service. The calculation of the most valuable accrual rate also takes into account the QSUPP, if any, payable in conjunction with the QJSA at each age. This calculation thus takes into account the value of benefits payable in any form and at any time under the plan.

Exhibit 1, at the end of this appendix, provides examples from the September 19, 1991 regulations relating to the determination of the most valuable accrual rate. While these regulations have been superseded, these examples are illustrative and may be helpful to the specialist. Specialists are cautioned that they may not require demonstrations to follow these examples.

The measurement period for determining accrual rates is one of the following, as selected by the employer:

1. the current plan year
2. the current plan year and all prior years
3. the current plan year and all prior and future years.

Years beginning after the employee's testing age (see **j.**, below), or, in the case of the most valuable accrual rate, after the employee's assumed termination (to calculate the QJSA), may not be included in the measurement period.

The measurement period that consists of the current year and all prior and future years may not be used if, on the basis of facts and circumstances, the pattern of accruals discriminates in favor of HCEs. Therefore, if the employer is using this measurement period, the specialist should determine if, under the plan, projected benefits for employees who may be HCEs are relatively frontloaded when compared to the projected benefits of other employees who may be NHCEs. If this is the case, the specialist should request a demonstration from the employer giving the facts and circumstances relevant to the determination of whether the employer's use of this measurement period is permissible.

The employer may limit the measurement period under a fresh-start alternative rule. (If the employer's demonstration indicates that the fresh-start alternative rule is being used, the specialist should first become familiar with the fresh-start rules discussed in line XI.b. of Worksheet 5A.) Under the fresh-start alternative, the employer may limit the measurement period for a fresh-start group to the period beginning after the fresh-start date with respect to that group. In order to use this rule, the plan must make a fresh start that satisfies the requirements described in line XI.b. of Worksheet 5A. However, for this purpose, the plan need not freeze employees accrued benefits as of the fresh-start date or determine benefits using one of the fresh-start formulas (but see below).

If the measurement period has been limited under this rule (or if the measurement period is the plan year) and the fresh start has been made in conjunction with a bona fide amendment to the benefit formula or accrual method that also freezes employees' accrued benefits as of the fresh-start date and provides post-fresh-start date compensation adjustments to the frozen accrued benefit, another rule applies. Provided the compensation adjustments are permissible under line XI.b. of Worksheet 5A, such adjustments during the measurement period may be disregarded in determining accrual rates.

Testing service, for purposes of determining accrual rates, generally means the employee's years of service as defined in the plan for purposes of the plan's benefit formula. Alternatively, testing service can be service determined for all employees in a reasonable manner. An example of a reasonable alternative definition of testing service is the number of years the employee has benefited under the plan. Also see Part VI of Worksheet 5 or Part VII of Worksheet 5A regarding service that may be taken into account as testing service.

Whatever definition of testing service the employer uses to determine accrual rates, that definition must credit employees with testing service for any year in which the employee benefits under the plan (unless the service is such that cannot be taken into account under Part VI (or VII) of the worksheet), even if the employee receives no service credit under the benefit formula for that year (e.g., because of a service cap).

If the measurement period is the current plan year, testing service (that is, the divisor in the formulas to determine accrual rates) is always 1, because this measurement period simply measures the increase in the accrued benefit and in the most valuable optional form of payment of the accrued benefit from one year to the next. The measurement period that consists of the current year and all prior years measures the annual increase in the "accrued to date" benefit. The measurement period that consists of the current year and all prior and future years measures the annual increase in the "projected" benefit.

Other rules apply to the determination of accrual rates. First, the rates must be determined in a consistent manner for all employees for the plan year. Second, projected plan benefits, testing service, and average annual compensation must be determined in a reasonable manner, reflecting actual or projected service and compensation only through the end of the measurement period. The employer's demonstration may not assume employee compensation increases in future years nor assume an employee will terminate before testing age (except for calculating the QJSA in connection with determining most valuable accrual rates). Finally, section 415 limits on plan benefits are to be disregarded in determining accrual rates. However, plan provisions implementing the section 415 limits may be taken into account if the plan does not provide benefit increases to former employees (whose benefits were tested taking into account such limits) as a result of COLA adjustments to the section 415 limits.

In determining accrual rates, permitted disparity may be imputed (see **e.**, below) and accrual rates may be grouped (see **f.**, below).

1.401(a)(4)-3(d)

A DB/DC plan must satisfy the DB general test on the basis of either employees' aggregate normal and most valuable allocation rates (contributions basis) or employees' aggregate normal and most valuable accrual rates (benefits basis).

Aggregate normal and most valuable allocation rates are determined as follows:

1. treat all DC plans in the DB/DC plan as a single plan and all DB plans in the DB/DC plan as a separate single plan
2. for the single DC plan, determine an allocation rate; for the single DB plan, determine equivalent normal and most valuable allocation rates (see **s.**, below)
3. add the allocation rate to the equivalent normal allocation rate to determine the aggregate normal allocation rate; add the allocation rate to the equivalent most valuable allocation rate to determine the aggregate most valuable allocation rate.

Aggregate normal and most valuable accrual rates are determined as follows:

1. treat all DC plans in the DB/DC plan as a single plan and all DB plans in the DB/DC plan as a separate single plan
2. for the single DC plan, determine an equivalent accrual rate (see **s.**, below); for the single DB plan, determine normal and most valuable accrual rates
3. add the equivalent accrual rate to the normal accrual rate to determine the aggregate normal accrual rate; add the equivalent accrual rate to the most valuable accrual rate to determine the aggregate most valuable accrual rate.

If the plan is being tested on a contributions basis, permitted disparity may not be imputed and grouping of allocation rates may not be used to determine allocation or equivalent allocation rates, but these may be applied to determine aggregate normal and most valuable allocation rates. Likewise, if the plan is being tested on a benefits basis, the following may not be used to determine accrual or equivalent accrual rates but may be applied to determine aggregate normal and most valuable accrual rates: imputing permitted disparity, grouping accrual rates, the fresh-start alternative, and the floor on most valuable rule.

Aggregate rates must be determined consistently for all employees for the plan year. Options that are not permitted in cross-testing a DC plan or a DB plan are not permitted in testing a DB/DC plan. These include the "projected" measurement period,

use of non-standard interest rates (see **g.**, below), the option to disregard post-fresh-start compensation adjustments, and the option to disregard post-NRA actuarial increases (see **k.**, below).

#### 1.401(a)(4)-(b)(2)

e. Under the general tests, employers may generally take into account their social security contributions made on behalf of employees by arithmetically imputing the disparity permitted under section 401(l) with respect to employer-provided contributions or benefits. This is done by determining an adjusted allocation or adjusted accrual rates (normal and most valuable). For the DC general test, the adjusted allocation rate, rather than the actual allocation rate, is then used to determine if the plan satisfies the test. For the DB general test, the adjusted normal and most valuable accrual rates are used in place of the actual normal and most valuable accrual rates.

The employer's demonstration of the general test should disclose whether disparity is being imputed for employees in determining allocation or accrual rates. If the employer has provided a separate demonstration or examples showing how disparity has been imputed in testing the plan, the specialist should review the demonstration or examples to determine that the imputation conforms to the requirements of the regulations described below.

Imputing disparity is available only to those plans to which section 401(l) is available. See Worksheet 5B.

Because of the overall permitted disparity limits, permitted disparity may not be imputed for an employee for a plan year if the employee also benefits under a section 401(l) plan (see Worksheet 5B) for a plan year that ends with or within the plan year of this plan. A plan will not fail to satisfy the consistency requirements of the general tests simply because it does not impute disparity for these employees. Also, disparity may not be imputed for an employee under more than one plan of the employer.

#### 1.401(a)(4)-7(a) and (d)

The adjusted allocation rate is determined under one of the following formulas that determines the excess contribution percentage under the hypothetical formula that would produce the employee's actual allocation, assuming full disparity using the taxable wage base (TWB) as the integration level (IL).

1. If plan year compensation  $\leq$  TWB, the adjusted allocation rate is the lesser of:
  - a. 2 times the unadjusted allocation rate, or
  - b. the unadjusted allocation rate plus the permitted disparity rate.

2. If plan year compensation > TWB, the adjusted allocation rate is the lesser of:

a. the rate produced by this fraction -

$$\frac{\text{allocations}}{\text{plan year compensation minus } 1/2 \text{ TWB}}$$

or

b. the rate produced by this fraction -

$$\frac{\text{allocations plus (permitted disparity rate times TWB)}}{\text{plan year compensation.}}$$

TWB is also determined as of the beginning of the plan year. See Worksheet 5B.

The permitted disparity rate is also the rate in effect under section 401(l)(2)(A)(ii) at the beginning of the plan year. For plan years beginning on or after January 1, 1995, however, the cumulative permitted disparity requirements must be considered. The annual imputed disparity fraction under a plan that imputes disparity for an employee is one. If an employee benefits under a defined benefit plan of the employer in a year beginning on or after January 1, 1995, the permitted disparity rate for the employee is zero if the addition of the annual imputed disparity fraction would result in a cumulative disparity fraction for the employee that exceeds 35. The effect is that no disparity may be imputed. (See Worksheet 5B.)

#### 1.401(a)(4)-7(b)

The adjusted accrual rate is determined under one of the following formulas that determines the excess benefit percentage under the hypothetical formula that would produce the employee's employer-provided accrual, assuming full disparity for each of the employee's first 35 years of testing service under the plan using covered compensation (CC) as the integration level (IL).

1. If average annual compensation (AAC)  $\leq$  CC, the adjusted accrual rate is the lesser of:

a. 2 times the unadjusted accrual rate, or

b. the unadjusted accrual rate plus the permitted disparity factor.

2. If  $AAC > CC$ , the adjusted accrual rate is the lesser of:

a. the rate produced by this fraction -

$$\frac{\text{employer-provided accrual}}{AAC \text{ minus } 1/2 \text{ CC}}$$

or

b. the rate produced by this fraction -

$$\frac{\text{employer-accrual plus (permitted disparity factor times CC)}}{AAC}$$

Covered compensation is defined in section 1.401(l)-1(c)(7) of the regulations and must be automatically adjusted each year. See Worksheet 5B. See **i.**, below regarding the definition of average annual compensation.

The permitted disparity factor for an employee equals the sum of the employee's annual permitted disparity factors for each year in the measurement period used to determine the accrual rate, divided by testing service during the measurement period.

The annual permitted disparity factor is 0.75 percent. However, unless the employee's testing age (see **j.**, below) is the same as the employee's social security retirement age or SSRA (see Worksheet 5B), this factor must be adjusted for benefits commencing at an age other than SSRA. For purposes of this adjustment, the employer must use the lesser of age 65 or the employee's testing age as the age at which benefits commence. Refer to Worksheet 5B regarding the calculation of this adjustment.

By way of example, for employees whose testing age is 65 and whose SSRA is 66, the annual permitted disparity factor is 0.70 percent. In the same example, if SSRA is 67, the annual permitted disparity factor is 0.65 percent.

An employer may use a smaller annual permitted disparity factor than that permitted if it is a uniform percent of that factor or a fixed percent (e.g., 0.65 percent) for all employees.

The annual permitted disparity factor for any year of testing service after the first 35 is zero, regardless of whether the measurement period extends beyond 35 years of testing service. For this purpose, the 35 years must be reduced by the employee's cumulative disparity fraction, determined without regard to this plan. See Worksheet 5B.

Disparity is not imputed for employees who have negative accrual rates determined without imputing.

1.401(a)(4)-7(c)

f. In determining allocation and accrual rates for the general tests, employers may choose to group rates. Under the grouping rules, all employees who have allocation or accrual rates within a specified range above and below a midpoint rate are treated as having allocation or accrual rates equal to that midpoint rate. The employer chooses the midpoint rate.

The employer should include with its demonstration of the general test a demonstration of how allocation or accrual rates have been grouped if grouping has been utilized. The specialist should review this demonstration to determine that the following requirements are satisfied.

First, in the case of allocation rates, the lowest and highest rates in a given range must be within five percent of the midpoint rate in that range. For example, if the midpoint normal allocation rate is ten percent, the range would be 9.5 percent to 10.5 percent. Alternatively, if allocation rates are expressed as a percentage of plan year compensation, the lowest and highest rates may vary from the midpoint rate by as much as one quarter of a percentage point. For example, if the midpoint allocation rate is three percent of plan year compensation, the permitted range would be 2.75 percent to 3.25 percent.

Second, in the case of normal accrual rates, the lowest and highest rates in a range must be within five percent of the midpoint rate, and in the case of most valuable accrual rates, the lowest and highest rates in a range must be within 15 percent of the midpoint rate. For example, if the midpoint most valuable accrual rate is two percent, the range would be 1.7 percent to 2.3 percent. Alternatively, if normal or most valuable accrual rates are expressed as a percentage of average annual compensation, the lowest and highest rates may vary from the midpoint rate by as much as one twentieth of a percentage point. For example, if the midpoint normal (or most valuable) accrual rate is 0.5 percent of average annual compensation, the permitted range would be 0.45 percent to 0.55 percent.

Third, rate group ranges may not overlap and the allocation or accrual rates of employees who do not fit within any of the ranges must be determined without grouping.

Finally, rates may not be grouped in a given range if the rates for HCEs in the range generally are significantly higher than the rates for NHCEs in the range.

1.401(a)(4)-2(c)(3)1.401(a)(4)-3(d)(3)(ii)

**g.** The employer should include in its demonstration of the general test a description of how benefits are normalized and employers are encouraged to provide examples of normalization of benefits.

"Normalize" is a defined term meaning to convert a benefit to an actuarially equivalent straight life annuity commencing at the employee's testing age (see **j.**, below regarding "testing age"). For example, in determining normal accrual rates, benefits that are not expressed as straight life annuities beginning at employees testing ages must be normalized. Also, in determining most valuable accrual rates, the QJSA must be normalized.

Normalization is also required in connection with cross-testing and additional rules apply. These are discussed in **s.**, below. Normalization is not relevant to DC plans tested on a contributions basis.

The actuarial assumptions that are used in normalizing a benefit must be reasonable and must be applied on a gender-neutral basis. A standard interest rate and a standard mortality table are automatically, but not exclusively, considered reasonable. A standard interest rate is one that is between 7.5 percent and 8.5 percent, compounded annually. The Commissioner may revise this rate from time to time. The definition of "standard mortality table" in section 1.401(a)(4)-12 of the regulations lists tables that are considered standard mortality tables. The Commissioner may also revise this list from time to time.

If the employer's demonstration indicates that actuarial assumptions other than assumptions based on standard interest rates and mortality assumptions have been used, the specialist should consider whether these assumptions are reasonable and, in particular, whether their use results in understatement of HCE rates or overstatement of NHCE rates.

The specialist should also ensure that the employer has satisfied the consistency requirements of the general tests in normalizing benefits.

1.401(a)(4)-3(d)(1) and (2)

1.401(a)(4)-8

1.401(a)(4)-12

**h.** If allocation rates are expressed as a percentage of plan year compensation or if accrual rates are expressed as a percentage of average annual compensation, the employer must include with its demonstration the definition of section 414(s) compensation used in determining plan year or average annual compensation. This does not have to be the same as the definition used in the plan's benefit formula. The employer should also demonstrate that the definition is nondiscriminatory unless the definition satisfies one of the safe harbor definitions contained in section 1.414(s)-1(c)(2) or section 1.414(s)-1(c)(3) of the regulations. Part X of Worksheet 5 (or Part XIII

of Worksheet 5A) may be completed to determine that a definition satisfies one of the safe harbor definitions in the regulations. This part of the worksheet may also be used to determine that the employer has adequately demonstrated that a nonsafe harbor definition of compensation is nondiscriminatory. Note, however, that if the plan imputes disparity, a definition of compensation will not be a section 414(s) definition if it results in significant under-inclusion of compensation for employees. This is because such a definition could distort the effect of imputing disparity.

1.401(a)(4)-2(c)(2)

1.401(a)(4)-3(d)(1)(i) and (ii)

1.401(a)(4)-3(e)(1)

1.401(a)(4)-3(e)(2)(i) and (ii)

1.401(a)(4)-12

1.414(s)-1(c) and (d)

i. The employer's general test demonstration should describe the method used to determine average annual compensation, which is used in calculating normal and most valuable accrual rates, or plan year compensation, which is used in calculating allocation rates. (This is not needed if rates are expressed as a dollar amount.)

Average annual compensation is the average of the employee's annual section 414(s) compensation determined over the averaging period in the employee's compensation history during which the average of the employee's annual section 414(s) compensation was the highest. The averaging period must consist of at least three consecutive 12-month periods, or the participant's entire period of service if shorter. (If the plan does not impute permitted disparity and does not base average compensation, for purposes of calculating benefits on consecutive 12-month periods, the "consecutive" requirement for average annual compensation does not apply.)

In making the determination of average annual compensation, the plan must look to the employee's compensation history for a continuous period that ends in the current plan year and is no shorter than the averaging period. The plan can disregard 12-month periods in which the employee terminates employment, performs no service, or performs service for a number of hours that is less than a number of hours specified by the employer (not to exceed 3/4 of full time hours for the 12-month period), provided compensation for these periods are disregarded by the plan in determining benefits. Similar rules allow months to be disregarded when average annual compensation uses 12-month periods that do not end on a fixed date, such as the 60 consecutive months producing the highest average.

If the measurement period for determining accrual rates is the plan year, the employer may use plan year compensation instead of average annual compensation. Plan year compensation is section 414(s) compensation for the plan year or a 12-month period ending within the plan year. For the year in which participation in the plan begins or ends, the plan may limit plan year compensation to the period of participation

provided the plan year is also the period for determining accruals and the use of period of participation is done in a nondiscriminatory and reasonably consistent manner from year to year.

Regardless of whether the employer is using average annual compensation or plan year compensation, compensation in excess of the limit under section 401(a)(17) may not be taken into account. See Alert Guidelines #4.

1.401(a)(4)-2(c)(2)

1.401(a)(4)-3(d)(1) and (2)

1.401(a)(4)-3(e)

1.401(a)(4)-12

j. Except in the case of a DC general test demonstration for a DC plan, the employer's demonstration must identify the testing age of employees used in calculating rates.

Testing age generally means the normal retirement age (NRA) under the plan when the plan provides a uniform NRA for all employees in the plan (for this purpose, social security retirement age is considered a uniform retirement age); however, testing age means age 65 if the plan does not provide a uniform NRA. If the plan has different uniform NRAs for different employees or groups of employees, the employee's testing age is the latest NRA under any uniform NRA under the plan, regardless of whether it actually applies to the employee.

If the employee is past the otherwise applicable testing age, testing age means the employee's current age. This rule applies only if the plan satisfies the rule described in k., below, that permits post-NRA benefit increases to be disregarded.

Specialists should check the testing age(s) identified by the employer against the NRA provisions of the plan to ensure that the correct testing ages have been used in calculating rates.

1.401(a)(4)-12

**II. The explanations in this section apply to defined benefit plans. Section III contains special rules pertaining to the subjects addressed in this section that apply to cross-tested defined benefit plans.**

k. Generally, the employer is required to take into account post-NRA accruals in determining accrual rates. However, if the plan provides for increases in an employee's accrued benefit solely because of a delay past NRA in commencement of benefits, the employer may choose to disregard the increase in determining accrual rates if the same uniform NRA applies to all employees and the increase factor (percentage) is no greater than the percentage that would be obtained using a standard mortality table and

an interest rate between 7.5 percent and 8.5 percent, compounded annually. If the employer indicates that post-NRA accruals are being disregarded, the specialist should determine that these requirements are satisfied.

1.401(a)(4)-3(f)(3)

**I.** Special rules apply in determining accrual rates if the plan provides for early retirement window benefits. An early retirement window benefit is an early retirement benefit, retirement-type subsidy, QSUPP, or other optional form of benefit that applies only to employees who terminate within a limited period specified by the plan, not to exceed one year.

First, an early retirement window benefit is not taken into account in determining an employee's normal accrual rate, even if the window benefit consists of a temporary change in the plan's benefit formula.

Second, an early retirement window benefit is disregarded in determining an employee's most valuable accrual rate for all years other than the first plan year in which it is currently available to the employee.

Finally, an early retirement window benefit is taken into account in determining an employee's most valuable optional form of payment of the accrued benefit (and thus the most valuable accrual rate) in the first plan year in which it is currently available to the employee.

If the employer's demonstration indicates that there are early retirement window benefits, the specialist should determine that the terms of the plan, in fact, provide for benefits that fall within the above definition and that the employer has correctly taken these benefits into account, or disregarded them, in determining accrual rates, as explained above.

1.401(a)(4)-3(f)(4)

**m.** Generally, an unpredictable contingent event benefit (defined in section 412(l)(7)(B)(ii)) is disregarded in determining accrual rates until the contingent event occurs. However, an employer may treat an unpredictable contingent event benefit like an early retirement window benefit if the contingent event is expected to result in termination of certain employees within a period, not to exceed one year, following the event. If the employer indicates that unpredictable contingent event benefits have been taken into account or disregarded in determining accrual rates, the specialist should determine that the treatment of these benefits is correct.

412(l)(7)(b)(ii)

1.401(a)(4)-3(f)(5)

**n.** There are two rules that allow offsets to be disregarded in determining accrual rates for DB plans. First, if the requirements of the floor-offset safe harbor described in Part IX of Worksheet 5A are satisfied, the offset to the accrued benefit that would otherwise be provided under the DB plan is disregarded in determining whether the DB plan satisfies a safe harbor or the DB general test. Under this safe harbor, the permitted offset is the actuarial equivalent of all or part of the account balance attributable to employer contributions under a DC plan maintained by the same employer.

If the plan includes an offset provision and the requirements of the floor-offset safe harbor are not satisfied, a second rule may operate to allow the disregard of the offset. This rule provides that in determining accrual rates the employee's accrued benefit will include that portion of the benefit that is offset, provided the benefit by which the plan benefit is being offset is attributable to periods for which the plan credits pre-participation or past service and the offset provision applies on the same basis for all similarly situated employees. See Part VII of Worksheet 5A. In addition, the offset must be for benefits under a qualified DB or DC plan (whether or not terminated), or for benefits under a foreign plan that are reasonably expected to be paid. Finally, nonforfeitable benefits may be offset only by other nonforfeitable benefits.

If the employer indicates that offsets are being disregarded under this second rule, the specialist should determine that these requirements are satisfied. If the employer indicates that the plan is part of a floor-offset arrangement, Part IX of Worksheet 5A should also be completed.

1.401(a)(4)-3(f)(9)

1.401(a)(4)-8(d)

**o.** Generally, qualified disability benefits, as defined in section 411(a)(9), are not taken into account in determining accrual rates. However, if a qualified disability benefit results from a plan provision that credits a disabled participant with imputed service or compensation under the plan's benefit formula during the period of disability, the employer may treat the qualified disability benefit as an accrued benefit on the employee's return if the benefit is then treated as an accrued benefit for all purposes under the plan.

1.401(a)(4)-3(f)(2)

**p.** The employer should indicate whether any of the other special rules in the regulations pertaining to testing for nondiscrimination in amounts are being applied. A listing and brief synopsis of these additional rules follows. If the employer indicates any of these rules are being applied, the specialist should refer to the appropriate regulations section for greater detail.

1. Determination of benefits on other than a plan year basis. This rule allows the employer to determine plan benefits on the basis of any period of at least 12 months that ends within the plan year, instead of on the basis of the plan year.

1.401(a)(4)-3(f)(6)

2. Adjustments for certain plan distributions. If years of service attributable to distributed benefits are taken into account in determining current accrued benefits, the accrued benefit, for purposes of determining rates, includes the actuarial equivalent of the prior distributions.

1.401(a)(4)-3(f)(7)

3. Adjustment for certain QPSA charges. If the plan reduces the accrued benefit to reflect the cost of the QPSA, this charge is ignored in determining the accrued benefit for purposes of determining rates.

1.401(a)(4)-3(f)(8)

4. Special rule for multiemployer plans. A multiemployer plan requirement to complete up to five years of future service in order to be entitled to an increase in benefits for prior service may be disregarded if the requirement applies to all employees in the plan.

1.401(a)(4)-3(f)(10)

q. The DB general test determines whether employer-provided benefits are nondiscriminatory in amount. If the plan is a contributory plan (i.e., the plan provides for employee contributions not allocated to separate accounts), the employer should also show that the employee-provided benefits are nondiscriminatory in amount and how the employer-provided benefit has been determined.

Part XII of Worksheet 5A describes the alternative methods available for determining the employer-provided accrued benefit in a contributory plan and for determining whether the employee-provided benefit is nondiscriminatory in amount. Although Part XII of the worksheet explains the nondiscriminatory amount rules pertaining to contributory defined benefit plans in the context of safe harbor plans, all of the alternative methods for determining the employer-provided accrued benefit and for determining whether the employee-provided benefit is nondiscriminatory in amount that are described in Part XII may be used by a DB general test plan. That is, while the regulations provide that certain methods may not be used by fractional accrual and

insurance contract safe harbor plans, the regulations do not prohibit a DB general test plan from using any of these methods.

Therefore, in reviewing a contributory DB general test plan, the specialist should complete Part XII of the worksheet. In particular, the specialist should note the following:

1. If the employer is using the composition-of-workforce method to determine the employer-provided benefit, the employer should demonstrate that the eligibility requirements for this method have been satisfied.

2. If the employer is using the grandfather rule to determine the employer-provided benefit, the employer should demonstrate that the benefits provided on account of employee contributions at lower levels of compensation are comparable to those provided on account of employee contributions at higher levels of compensation.

3. If the employer is using the total benefits method to show that employee-provided benefits are nondiscriminatory in amount, the employer should demonstrate that the DB general test would be satisfied if the sum of employer-provided and employee-provided benefits were treated as all employer-provided.

4. In determining employer-provided accrued benefits (and therefore normal and most valuable accrual rates), the following rules apply:

a. Generally, the rules of section 411(c) apply, unless one of the alternatives in b. through d. is used. See Alert Guidelines #2A.

b. If the composition-of-workforce or minimum-benefit method is used, an employee's normal and most valuable accrual rates (determined prior to application of the imputed disparity, grouping, and floor on most valuable rules) are each reduced by subtracting therefrom the product of the employee's contributions (as a percentage of plan year compensation) and a factor. The factors for both methods are contained in Worksheet 5B (line II.d(ii)). After this subtraction, the rules regarding imputed disparity, grouping, and floor on most valuable may be applied.

c. If the grandfather method is used, the employer-provided benefit is the total benefit minus the employee-provided benefit determined using any reasonable method contained in the plan, provided it is the same method for purposes of the comparability analysis described in 2., above.

d. If the government plan method or cessation of employee contributions method is used, all benefits are treated as employer-provided.

1.401(a)(4)-3(c)

1.401(a)(4)-6

r. There is a special "safety valve" rule in the regulations under which a plan that would otherwise fail the DB general test may be deemed to satisfy the test. This rule is intended to allow plans that fail the general test by a small margin to be treated as passing if the facts and circumstances indicate the plan is actually not discriminatory in the amount of employer-provided benefits. This rule is applicable to DB plans testing on either a benefits or contributions basis, but is not applicable to DB/DC plans.

A plan will be deemed to satisfy the DB general test if it in fact satisfies the test when no more than five percent of the HCEs in the plan (determined by rounding to the nearest whole number) are treated as not benefiting and, on the basis of all relevant facts and circumstances, the Service determine that the plan does not discriminate with respect to the amount of employer-provided benefits.

Among the facts and circumstances that may be taken into account in making this determination are:

1. the extent to which the test is failed
2. the extent to which the failure is attributable to nondesign reasons
3. whether the HCEs causing the failure are five percent owners or among the highest paid
4. whether the failure was caused by a nonrecurring event
5. the extent to which the failure is attributable to benefits accrued under a prior benefit structure or while an employee was not a HCE.

If the employer has requested a determination involving application of this safety valve rule, or if it is determined that the plan does not satisfy the general test and the employer requests consideration of this rule, the specialist should consult with his or her group manager or the review staff regarding the further processing of the determination letter application.

1.401(a)(4)-3(c)(3)

### **III. The explanations in this section apply to cross-tested plans only.**

s. Instead of testing a DC plan on a contributions basis or a DB plan on a benefits basis, an employer may choose to cross-test a DC plan on a benefits basis or a DB plan on a contributions basis. See **b.**, above. This section addresses the determination of equivalent accrual rates and equivalent normal and most valuable allocation rates for plans that are attempting to satisfy a general test on a cross-tested basis.

This section also addresses the modified general test that is available to cash balance plans under the safe harbor testing method for cash balance plans in the regulations. A cash balance plan is a defined benefit plan that defines benefits for each employee by reference to the employee's hypothetical account. The modified general test allows such a plan to satisfy the DC general test, substituting hypothetical for actual allocations.

Finally, the explanations in this section are also relevant to the determination of aggregate normal and most valuable allocation or accrual rates in the case of a DB/DC plan.

This part of the explanation is organized as follows. First, the method for determining equivalent accrual rates for a cross-tested DC plan is described. This first part also addresses age-weighted, cross-tested profit-sharing plans, the type of cross-tested plan the specialist will probably most frequently encounter. Next, the modified general test under the safe harbor testing method for cash balance plans is addressed. Lastly, the method for determining equivalent normal and most valuable allocation rates for a cross-tested DB plan is described.

1.401(a)(4)-8

1.401(a)(4)-9(b)(2)(ii)

An equivalent accrual rate is determined as follows. First, the employer must select a measurement period. (See **d.**, above.) However, the employer must use the current plan year ("annual") measurement period or the "accrued to date" measurement period. The employer may not use the "projected" measurement period that includes future years. Next, the employer must determine the increase in the employee's account balance during the measurement period and divide this by the number of years in which the employee benefited under the plan during the measurement period. This amount is then normalized to a straight life annuity. The annual benefit is then expressed either as a dollar amount or as a percentage of the employee's average annual compensation.

In determining the increase in the account balance during the measurement period, income, expenses, gains, and losses allocated during the measurement period but attributable to the account balance as of the beginning of the measurement period are not counted. If the employer is using the current plan year as the measurement period, the employer may choose also to disregard all other gains, losses, etc. allocated during the year, thus taking into account only contributions and forfeitures. Amounts that would have been included in the increase but for the fact they were previously distributed are also to be counted, with a reasonable adjustment for interest. However, the employer may choose to disregard distributions made to NHCEs or distributions made to any employees in plan years beginning before January 1, 1986, or an earlier date selected by the employer.

In normalizing the increase in the account, the employer must use a standard interest rate, a standard mortality table, and a straight life annuity factor based on a standard interest rate. (See **g.**, above.) Pre-testing age mortality may not be assumed.

The employer may apply the DB general test rules relating to imputed disparity, rate grouping, and the fresh-start alternative to equivalent accrual rates. The other rules discussed in **k.** through **p.**, above do not apply.

Equivalent accrual rates must be determined in a consistent manner for all employees for the year.

A plan will not fail to satisfy the DC general test on the basis of equivalent accrual rates merely because allocations are made at the same rate for employees past testing age as for employees who are at testing age. See **j.**, above. For this purpose, testing age is determined without regard to the current age rule. That is, testing age is NRA or age 65.

The rules relating to cross-testing of DC plans also apply to target benefit plans that fail to satisfy the target benefit plan safe harbor. See Part X of Worksheet 5.

A common type of cross-tested plan that the specialist will encounter is the so-called age-weighted, cross-tested profit-sharing plan. Under this type of plan, the employer's contribution may be allocated to participants' accounts on the basis of factors that combine compensation with annuity factors based on age. The older participants have larger deferred annuity factors and thus receive greater contributions as a percentage of compensation. The factors used to determine the allocation may also reflect imputed disparity.

When this type of plan is tested on an equivalent benefits basis, however, the higher contribution (as a percentage of compensation) that an older HCE receives may not be discriminatory when compared with the lower contribution (as a percentage of compensation) that a younger NHCE receives. The reason for this is as follows. When the increases to the accounts of the HCE and the NHCE are normalized to straight life annuities beginning at the testing age under the cross-testing rules, they are in effect "credited" with interest between the current plan year and the time the employee attains testing age. (The annuity purchase rate at the testing age is discounted back to the employee's current age.) The younger NHCE's account is "credited" with interest over a longer period, so that at the testing age, the benefits of the HCE and the NHCE will have been equalized.

If the employer is seeking a determination that an age-weighted, cross-tested profit-sharing plan satisfies the nondiscrimination in amount requirement, the employer must provide a demonstration that the plan satisfies the DC general test on a benefits basis, and the specialist should review this demonstration as any other. However, such a plan should usually satisfy the general test if:

1. but for the age-weighting and imputing (if applicable), the allocation would be pro rata based on section 414(s) compensation;
2. the age-weighting factors conform to the normalization requirements for DC cross-tested plans described above;
3. any imputed disparity satisfies the imputed disparity rules that apply to DB plans;
4. the other rules relating to DC cross-tested plans described above are satisfied; and
5. the plan satisfies the minimum coverage requirements.

Of course, employers may show other formulations to be nondiscriminatory.

In reviewing an age-weighted, cross-tested profit-sharing plan, the specialist should also ensure that the definite allocation formula, top-heavy, and section 415 requirements are satisfied. The terms of the plan must ensure that required top-heavy minimum contribution requirements will be satisfied and that the section 415 limits applicable to DC plans will not be exceeded. Of course, the manner in which the plan satisfies these other requirements must be accounted for in the employer's general test demonstration.

#### 1.401(a)(4)-8(b)

If the plan is a cash balance plan (other than a cash balance plan that satisfies the design-based safe harbor discussed in Part XI of Worksheet 5A), and the employer has requested a determination that the plan satisfies a general test, the employer may demonstrate that the plan satisfies the modified general test provided in the safe harbor testing method for cash balance plans in the regulations. The rules for this safe harbor are contained in section 1.401(a)(4)-8(c)(3) of the regulations.

These regulations incorporate a modified general test in section 1.401(a)(4)-8(c)(3)(iii)(C) that allows the plan to satisfy the DC general test on the basis of hypothetical allocations. If the employer is using the modified general test, the specialist should refer to the regulations to determine that the requirements of the modified general test as well as the other requirements of section 1.401(a)(4)-8(c)(3) are met. The specialist should also refer to section 1.401(a)(4)-13(f) of the regulations which contains special fresh-start rules.

If the cash balance plan is not using the safe harbor testing method, the determination of whether it is nondiscriminatory in amount is made in accordance with the rules for testing a DB plan on a contributions basis which follow.

#### 1.401(a)(4)-8(c)(3)

#### 1.401(a)(4)-13(f)

Equivalent normal and most valuable allocation rates (used in cross-testing a DB plan) are, respectively, the actuarial present value of the increase over the plan year in the benefit that would be taken into account in determining the employee's normal and most valuable accrual rates for the plan year, expressed as a dollar amount or as a percentage of plan year compensation. If the plan is a contributory plan, the employer-provided benefit must be determined under the rules in section 411(c), or under the government plan or cessation of contributions method. (See **q.**, above.)

Actuarial present value must be determined using a standard interest rate and mortality table, and no mortality may be assumed prior to the employee's testing age. (See **g.**, above.)

The employer may impute disparity and group equivalent normal and most valuable allocation rates under the DC general test rules. Limitations under section 415 may be taken into account. The rules in **l.**, **n.**, and **o.**, above, relating to early retirement window benefits, offsets, and qualified disability benefits, respectively, apply to the determination of equivalent normal and most valuable allocation rates, as do any other mandatory rules described in **Section II**. However, the optional rules in **k.**, **m.**, and **p.**, above do not apply.

Equivalent accrual rates must be determined in a consistent manner for all employees for the year.

1.401(a)(4)-8(c)(1) and (2)

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## Part 2 - Average Benefit Test Demonstrations

### Introduction

A plan will satisfy the average benefit test if it satisfies both the nondiscriminatory classification test and the average benefit percentage test.

An employer that requests a determination regarding the average benefit test must submit a demonstration that the test is satisfied. This demonstration should be labeled Demo 5.

The requirements of the nondiscriminatory classification test are addressed in line IV.b.(i) of Worksheet 5 or in line V.b.(i) of Worksheet 5A. If the employer has requested a determination that the plan satisfies the average benefit test, the specialist should first complete this line of the worksheet.

The second part of the average benefit test - the average benefit percentage test - is satisfied if the average benefit percentage of the plan for the plan year is at least 70 percent. This determination is made on the basis of benefits provided not only under the plan, but also under other plans of the employer that are in the plan's "testing group." ("Testing group" is defined below.)

A plan's average benefit percentage is determined by first calculating individual employee benefit percentages, then determining averages of these percentages for the group of NHCEs and the group of HCEs, and finally dividing the average determined for the NHCE group by the average determined for the HCE group. If the result is at least 0.70, the average benefit percentage test is satisfied.

This part of the appendix relates primarily to how employee benefit percentages are determined. Because the manner in which these percentages are determined is designed to coordinate with the determination of accrual and allocation rates for the general nondiscrimination in amount tests, the specialist should become familiar with the general test rules described in Part 1 of this appendix as a first step in reviewing an employer's demonstration of the average benefit percentage test. This part of the appendix will refer frequently to Part 1.

The organization of the following explanations follows, as much as possible, that of the guidelines provided for average benefit test demonstrations in the instructions for Schedule Q (Form 5300).

410(b)(2)

1.410(b)-2(b)(3)

1.410(b)-5(a), (b), and (c)

**1.** Certain collectively bargained plans that also benefit noncollectively bargained employees may be deemed to satisfy the average benefit percentage test, in which case a demonstration that the average benefit percentage of the plan is at least 70 percent is not needed.

A plan that benefits both collectively bargained and noncollectively bargained employees is deemed to satisfy the average benefit percentage test if the following two requirements are satisfied:

- a. The provisions of the plan apply identically to all employees in the plan.
- b. The plan satisfies the ratio percentage test when the mandatory disaggregation and excludable employee rules for collectively bargained and noncollectively bargained employees are disregarded.

If the employer is using this rule to show that the plan satisfies the average benefit percentage test, the employer should provide the modified ratio percentage test demonstration. The specialist should also ensure that the plan does not have provisions that do not apply identically to all employees under the plan.

1.410(b)-5(a)

1.410(b)-5(f)

**2.** The basic requirement of the average benefit percentage test is that the average benefit percentage of the plan for the plan year must be at least 70 percent. The average benefit percentage of the plan for a plan year is determined by dividing the actual benefit percentage of the NHCEs in plans in the testing group for the testing period that includes the plan year by the actual benefit percentage of the HCEs in plans in the testing group for that testing period. "Testing group" and "testing period" are defined below.

The actual benefit percentage of a group of employees for a testing period is the average of the employee benefit percentages that are calculated separately for each employee in the group. In determining actual benefit percentages, all nonexcludable employees are taken into account, regardless of whether they are benefiting under any plan in the testing group.

The employer's demonstration should show the actual benefit percentages for both the NHCE group and the HCE group to establish that the 70 percent requirement is satisfied. The employer need not indicate the employee benefit percentages for the individual employees in the two groups. However, if there is a question as to whether all nonexcludable employees have been taken into account in determining the actual benefit percentages for the two groups, the employer may be asked to provide an additional demonstration or representation.

1.410(b)-5(a), (b), and (c)

**3.** The employer must show that the plan satisfies the nondiscriminatory classification test. Complete line IV.b.(i) of Worksheet 5 or line V.b.(i) of Worksheet 5A to determine whether this test has been satisfied.

1.410(b)-2(b)(3)

1.410(b)-4

**4.** The employer's demonstration of the average benefit percentage test should identify and describe the method used for determining employee benefit percentages. As noted, the employer is not required to show the calculation of each individual employee's employee benefit percentage; however, employer's are encouraged to

include with their demonstrations examples of representative sample employees showing how they have applied the requirements of the regulations in determining employee benefit percentages. If such examples have been submitted, they should be reviewed to determine that the methods used in the examples conform to the requirements of the regulations.

In determining employee benefit percentages, only employer-provided contributions and benefits are taken into account. The rules for determining the employer-provided benefit under a contributory defined benefit plan (and for determining whether the employee-provided benefits in such a plan are nondiscriminatory in amount) are described under **q.** in the preceding general test explanations. Employee contributions that are allocated to a separate account also are not taken into account in calculating employee benefit percentages.

#### 1.410(b)-5(d)(2)

In determining employee benefit percentages, all plans in the testing group are taken into account. See **c.**, below, for the definition of "testing group." The employer may not take into account plan that are not in the testing group.

#### 1.410(b)-5(d)(3)(i)

Employee benefit percentages are determined on the basis of plan years that end in the same calendar year, referred to in the aggregate as the "testing period." For example, in determining whether a plan satisfies the average benefit percentage test for a plan year ending 9/30/94, employee benefit percentages would be calculated using benefit information for each plan in the testing group determined with respect to the year of the plan that ends in 1994.

#### 1.410(b)-5(d)(3)(ii)

Employee benefit percentages may be determined on either a contributions or benefits basis, provided the same basis (contributions or benefits) is used for all plans in the testing group with respect to the testing period. (See the discussion of benefits and contributions testing and cross-testing under **Introduction** and **b.** in the preceding explanations of the general tests.) Thus, an employer could choose to determine employee benefit percentages for the testing group on a benefits basis for 1994 and on a contributions basis for 1995.

#### 1.410(b)-5(d)(4)

An employee's employee benefit percentage for a testing period is the rate that would be determined for the employee in applying the general nondiscrimination in amounts tests if all plans in the testing group were aggregated. Refer to the discussion of how rates are determined under **Introduction, b., d., and s.**, in the preceding explanations of the general tests.

The following table shows the rate that would generally be used to determine employee benefit percentages. (This table does not reflect certain optional rules, discussed later, that the employer may choose to apply.) The variables in the table are 1) the types of plans in the testing group and 2) whether the employer is using contributions or benefits testing.

<u>Testing Group</u>	<u>Contributions Testing</u>	<u>Benefits Testing</u>
DC only	Allocation rate (1.401(a)(4)-2(c)(2))	Equivalent accrual rate (1.401(a)(4)-8(b)(2))
DB only	Equivalent normal allocation rate (1.401(a)(4)-8(c)(2))	Normal accrual rate (1.401(a)(4)-3(d))
DC & DB	Aggregate normal allocation rate (1.401(a)(4)-9(b)(2)(ii)(A))	Aggregate normal accrual rate (1.401(a)(4)-9(b)(2)(ii)(B))

If all of the plans in the testing group do not have the same plan year, employee benefit percentages are determined in two steps. First, for each group of plan that have the same plan year, determine employee benefit percentages as shown above. Second, add all the results from the first step together so that the final resulting employee benefit percentage takes into account all plans in the testing group. This two-step calculation is necessary solely because plans with different plan years may not ordinarily be aggregated for purposes of section 410(b).

#### 1.410(b)-5(d)(5)(i) and (ii)

Note that the determination of employee benefit percentages is generally based on normal rates (that is, most valuable rates are not taken into account and need not be determined). However, under certain circumstances, most valuable rates must be used in lieu of normal rates. If any DB plan in the testing group provides subsidized early retirement benefits to any HCE, most valuable rates must generally be used to determine employee benefit percentages. (In this case, substitute "most valuable" for "normal" in the table above.) For this purpose, an early retirement benefit is subsidized if the average actuarial reduction for the benefit commencing in the five years preceding

NRA is less than four percent per year. However, the employer is not required to use most valuable rates if the percentage of NHCEs to whom the subsidized early retirement benefit is currently available under plans in the testing group is at least 70 percent of the percentage of HCEs to whom the benefit is available.

Often, the specialist will not be able to determine whether the employer is required to use most valuable rates. If there is a question as to whether there are any DB plans in the testing group with early retirement benefits that would require the use of most valuable rates, the specialist may request the employer for a representation or demonstration.

#### 1.410(b)-5(d)(7)

Employee benefit percentages must generally be determined on a consistent basis for all employees and plans in the testing group. Thus, for example, any optional rules available in determining rates for the general nondiscrimination in amounts tests that the employer uses in determining employee benefit percentages must be applied on a consistent basis to all employees and all plans in the testing group.

#### 1.410(b)-5(d)(5)(iii)

The regulations provide several alternative methods for determining employee benefit percentages.

First, the employer may separately determine the employee benefit percentages for each plan in the testing group and then add these separately determined percentages. Even though the employer uses this option, employee benefit percentages generally must still be determined in a consistent manner with respect to all employees and plans in the testing group. However, the following inconsistencies in determining the separate employee benefit percentages for each plan will not be considered to violate this requirement if it is reasonable to assume that the inconsistencies do not result in a significantly higher average benefit percentage:

- a. use of different definitions of section 414(s) compensation (see **h.**, below and also in the preceding general test explanation)
- b. use of different definitions of average annual compensation (see **i.**, below and also in the preceding general test explanation)
- c. use of different testing ages (see **j.** in the preceding general test explanation)
- d. use of different fresh-start dates (see the discussion of the fresh-start alternative rule under **d.** in the preceding general test explanation)

e. use of different actuarial assumptions for normalization (see **g.** in the preceding general test explanation)

f. disregard of actuarial increases after NRA regardless of whether such actuarial increases are uniform (see **k.** in the preceding general test explanation)

g. disregard of QPSA charges regardless of whether such charges are uniform (see **p.** in the preceding general test explanation).

#### 1.410(b)-5(e)(2)

A second alternative allows the employer to determine employee benefit percentages by excluding from the testing group all plans that are of a different type than the plan being tested. For example, if the employer is demonstrating the average benefit percentage test for a DC plan, the employer may exclude all DB plan from the testing group. In this case, the employer is required to determine employee benefit percentages on a contributions basis. Conversely, the employer could exclude all DC plans when testing a DB plan. In this case, the employer is required to determine employee benefit percentages on a benefits basis.

If the employer is using this alternative, then each plan in the testing group of the other type than the plan for which the demonstration is submitted must satisfy either the average benefits test using this same alternative or the ratio percentage test. For example, if the employer is demonstrating that a defined benefit plan satisfies the average benefit test using this option and the employer has excluded all DC plans from the testing group, each of those DC plans would have to satisfy either the average benefit test on a contributions basis excluding all DB plans from the testing group or the ratio percentage test.

If the employer is using this alternative and there is a question as to whether these requirements are satisfied, the specialist may request a representation or demonstration.

#### 1.410(B)-5(e)(3)(i) and (ii)

A third alternative is available for determining employee benefit percentages for a safe harbor DB plan if there are no DC plans in the testing group, percentages are determined on a benefits basis, and no plans in the testing group provide early retirement benefits that would require use of most valuable rates.

This alternative permits a simplified determination of employee benefit percentages with respect to the safe harbor plan. If the plan is not a section 401(l) plan (that is, the plan does not provide for permitted disparity in benefits), the employer may determine an employee's employee benefit percentage as follows. If the plan is a unit

credit safe harbor plan, the employee benefit percentage under the plan may be deemed equal to the employee's benefit rate in the plan year under the benefit formula. If the plan is a fractional accrual rule safe harbor plan, the employee benefit percentage under the plan may be deemed equal to the rate at which the employee's benefit accrues in the plan year, taking into account the benefit formula and the employee's projected service at NRA.

If the plan is a section 401(l) plan, the employer may determine an employee's employee benefit percentage as follows. If the plan is a unit credit safe harbor plan, the employee benefit percentage under the plan may be deemed equal to the employee's excess benefit percentage or gross benefit percentage in the plan year under the benefit formula. If the plan is a fractional accrual rule safe harbor plan, the employee benefit percentage under the plan may be deemed equal to the rate at which the employee's excess or gross benefit accrues in the plan year, taking into account the benefit formula and the employee's projected service at NRA.

#### 1.410(b)-5(e)(4)

Under a fourth alternative, the employer may determine an employee's employee benefit percentage for a testing period as the average of the separately determined percentages for that employee for the testing period and the immediately preceding one or two testing periods. If the employer uses this averaging method for an employee, the employer must determine the employee's percentages on a consistent basis for all testing periods in the averaging period.

#### 1.410(b)-5(e)(5)

### **I. The explanations in this section generally relate to all average benefit percentage test demonstrations (unless otherwise noted).**

a. The employer's demonstration should indicate the testing period as discussed above. That is, the employer should specify the plan year of the plan for which the demonstration is submitted. The benefit information used in the demonstration with respect to any plan in the testing group should be based on that plan's plan year that ends in the same calendar year as the plan year specified by the employer. Certain corrective amendments made after the end of the plan year may be taken into account as if adopted and in effect as of the beginning of the plan year. (See the discussion of corrective amendments in Alert Guidelines #4.)

There is, however, a special rule that applies solely for purposes of whether the Service will issue a determination letter. This rule provides that, under limited circumstances, the employer may use data in preparing a demonstration (including a general test or average benefit test demonstration) that is for a year prior to the plan year that the employer has indicated is the year being tested. If the employer is using a

prior year's data, it is required to disclose this in its application. The specialist need not check that all the conditions for using a prior year's data have been met (such as that the data is the most recent available or that there has been no misstatement with respect to the data). However, specialists should note that a prior year's data will not be acceptable unless the data is relevant to the operational effect of the plan provisions under review and coverage testing is based on the same prior year's data. The fact that a favorable determination letter has been issued for a plan on the basis of a prior year's data does not mean that the employer may rely on a prior year's data in testing a plan's operational compliance with the qualification requirements. However, see Rev. Proc. 93-42 regarding data and substantiation requirements relevant to testing operational compliance.

1.401(a)(4)-11(g)  
1.410(b)-5(e)(5)  
Rev. Proc. 93-42

**b.** See **d.** in the preceding general test explanations regarding requirements pertaining to testing service.

**c.** The employer's demonstration should identify the plans in the testing group. The testing group consists of the plan for which the demonstration is submitted and every other plan of the employer that could be permissively aggregated with the plan under the rules described in Part III of Worksheet 5 or Part IV of Worksheet 5A. In determining whether plans could be permissively aggregated with for this purpose, the following special rules apply.

Disregard the rule that portions of plans benefiting employees of the same QSLOB may not be aggregated if any of the plans uses employer-wide testing. Disregard the requirement that plans have the same plan year. Disregard the rules regarding mandatory disaggregation of section 401(k) plans, section 401(m) plans, and ESOPs in applying the rule that disaggregated plans may not be permissively aggregated. However, the other disaggregation rules apply. Thus, for example, if an employer applies section 410(b) separately to the portion of a plan that benefits employees who have not satisfied the greatest permissible age and service conditions allowed under section 410(a), this portion of the plan would not be aggregated with the other portion of the plan (i.e., would not be included in the testing group) in performing the average benefit percentage test.

1.410(b)-7(e)

**d.** See the discussion under **4.**, above regarding testing on a contributions or benefits basis.

**e.** An employer may impute permitted disparity in determining employee benefit percentages in accordance with the rules that apply in determining rates for the general tests. See **e.** of the preceding general test explanations.

If the employer is determining employee benefit percentages separately for individual plans (or subsets of plans, as a result of different plan years), permitted disparity may be imputed for an employee under only one plan (or subset of plans). (If the employer is using the simplified method to determine employee benefit percentages for a DB section 401(l) plan, this will be treated as an imputation of permitted disparity.) However, if the employer is using the same average annual or plan year compensation to determine employee benefit percentages in more than one plan, the employee's percentages for these plans may be totaled prior to imputing.

If the testing group includes any plans for which section 401(l) is not available (e.g., section 401(k) plans), then employee benefit percentages are determined by first calculating an adjusted rate (disregarding the plan for which section 401(l) is not available) and then adding that to the rate for the plan for which section 401(l) is not available.

If the employer is determining employee benefit percentages by excluding plans of another type from the testing group, any disparity used or imputed under those excluded plans must still be taken into account in determining the extent to which disparity may be imputed with respect to plans not excluded from the testing group.

1.410(b)-5(d)(6)

1.410(b)-5(e)(3)(iii)

1.410(b)-5(e)(4)(ii)

**f.** An employer may apply grouping in determining employee benefit percentages in accordance with the rules that apply in determining rates for the general tests. See **f.** of the preceding general test explanations.

**g.** See **g.** of the general test explanations regarding normalization.

**h.** See **h.** of the general test explanations regarding section 414(s) compensation. As an alternative in determining employee benefit percentages, the employer may use any reasonable definition of compensation that does not by design favor highly compensated employees. A definition is reasonable if it is a basic section 415 definition and may exclude certain types of irregular or additional compensation. The employer does not have to demonstrate that the definition is nondiscriminatory provided it is used for all employees and it is reasonable to believe that it will not significantly increase the average benefit percentage.

1.410(b)-5(e)(6)

i. Any of the alternative methods of determining average annual compensation or plan year compensation under the general tests are also available in determining employee benefit percentages. See i. of the general test explanations.

1.410(b)-5(d)(5)(iii)

j. See j. of the general test explanations regarding testing age.

k. through p. See k. through p. of the general test explanations regarding the application of these special rules.

q. As discussed above, only employer-provided contributions and benefits are taken into account in determining employee benefit percentages. See q. of the general test explanations regarding the determination of the employer-provided benefit.

1.410(b)-5(d)(2)

**II. This section relates to average benefit percentage test demonstrations involving cross-testing. A demonstration will involve cross-testing if the rate used to determine employee benefit percentages is an equivalent rate or an aggregate rate, as shown in the table in 4., above.**

r. See d. and s. of the general test explanations regarding the determination of equivalent and aggregate allocations and benefits.